	Application No.	Applicant(s)
Notice of Allowability	09/964,039	HALASZ, DAVID E.
	Examiner	Art Unit
	Salman Ahmed	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *11/2/2005*.

2. ☒ The allowed claim(s) is/are *1,3-10,12-18(currently renumbered 1-16)*.

3. ☒ The drawings filed on *26 September 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. Larry Donovan on Nov 22nd 2005 around 10:50 a.m.

2.   The application has been amended as follows:

Claims 2 and 11 have been cancelled.

Allowable Subject Matter

3.   Claims 1, 3-10,12-18 are allowed.

Reason for Allowance

4.   The following is an examiner's statement of reasons for allowance: The instant

application claims a sampler and a processor applying a method of packet assembly in

a wireless transmission system, comprising the steps of sampling at least first and

second packets of a plurality of packets; calculating respective throughput times for

each of first and second packets, and consolidating first and second packets into a third

packet if the sum of corresponding throughput times exceeds a predetermined limit.

Throughput time is defined to be:

Throughput time = Data Packet time + SIFS time + ACK time + DIFS time + Average Back-off time

The prior arts alone or in combination fail to jointly suggest or teach the claimed

combination of features as taught by the instant application. The prior arts   do not

specifically teach the steps of sampling at least first and second packets of a plurality of

packets; calculating respective throughput times for each of first and second packets,

and consolidating first and second packets into a third packet if the sum of

corresponding throughput times exceeds a predetermined limit. Therefore claims 1-18

are to be deemed allowable over prior art.

Citation of Relevant Prior Art

5.   The prior arts made of record and not relied upon are considered pertinent to

applicant's disclosure.

The prior art Rajan et al. (US PAT PUB 2002/0196787) teaches an apparatus

employing a method for concatenating packets to be transmitted from a first node to a

second node, the method comprising the steps of: receiving packets having at least one

traffic characteristic from at least one input port; concatenating n received packets to

form a concatenated packet; and   transmitting the concatenated packet from the first

node to the second node, characterized in that the n received packets have a common

traffic characteristic and n is determined based on the common traffic characteristic.

The prior art Barri (US PAT 5199027) teaches (column 1 lines 40-47) a

processing means to re-calculate total bandwidth at least from individual bandwidth

values contained in maintenance cells transmitted on virtual paths and adjust calculated

total bandwidth in function of re-calculated total bandwidth.

The prior art Hiller et al. (US PAT 5327421) teaches a telecommunications

switching system, apparatus employing a method for receiving synchronous pulse code

modulated (PCM) signals, each signal carrying PCM channels. Each byte of PCM

signals is stored in selectable memory locations in buffer memories. Hiller et al. teaches

method of adding header data to outputs of buffer memories for forming composite

packets, each composite packet comprising bytes from PCM channels of PCM signals.

Hiller et al. further teaches method for transmitting periodically composite packets in

output signals to a unit for switching packets where the selectable memory locations are

selected to group each bytes of channels destined for a common switching system into

one composite packet.

The prior art Garcia-Luna-Aceves et al. (US PAT PUB 2002/0154602) teaches

(page 1 section 0013) two notable rate-control approaches, the Tri-S scheme and TCP

Vegas. The Tri-S algorithm is a rate-based scheme that computes the achieved

throughput by measuring the RTT for a given window size (which represents the amount of outstanding data in the network). It compares the throughput for a given window and then for the same window increased by one segment. If the throughput is less than one-half that was achieved with the smaller window, they reduce the window by one segment. TCP Vegas tries to prevent congestion by estimating the expected throughput and then adjusting the transmission window to keep the actual observed throughput close the expected value.

IEEE publication "Scaling CSMA/CD to 1 Gb/s with frame bursting", Molle, M., Kalkunte, M., Kadambi, J. Local Computer Networks, 1997 teaches frame bursting method where (page 213) the sender can transmit several frames, separated by extended carrier, in a single burst. However, the maximum burst length is based on the maximum frame size instead of the slot time. The condition for including another frame into an ongoing burst is based on two tests. First, the starting time for the next frame must occur before the burst timer reaches a certain cutoff value. Second, the next frame must be available for transmission by the end of the interframe gap period. Initially, the burst limit was set at 12,000 bit times, which was deliberately chosen to be just below the maximum frame length to promote fairness.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Salman Ahmed whose telephone number is (571)272-

8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

                                        Salman Ahmed
                                        Examiner
                                        Art Unit 2666

SA

                                        Seema S. Rao
                                        SEEMA S. RAO   12/12/05
                                        SUPERVISORY PATENT EXAMINER
                                        TECHNOLOGY CENTER 2600